

In the Specification:

Please amend the Specification by inserting before the first line, the following sentence:

"This Application is a Divisional of Application Serial No. 10/394,312, filed March 19, 2003."

Page 3, paragraph beginning at line 1 has been amended as follows:

Some examples of the use of these approaches for functional applications are described, for example, in U.S. Patent Nos. 5,433,280; 5,544,550 and 5,839,329 ~~5,433,280, 5,544,550, and 5,839,329~~ to Smith et al. These describe the use of selective laser sintering a tungsten carbide-polymer composite powder to generate a "green" drill bit which is then infiltrated in a furnace cycle with a copper alloy to generate a fully functional drill bit for down hole oil exploration. U.S. Patent No. 4,554,218 describes the use of a powder mixture having a first metal and a second metal, such as A6 tool steel, and a fugitive binder that is placed in a mold, cured to a green part and then infiltrated with a third metal, preferably a copper or copper-containing alloy, to form an infiltrated, molded metal composite article. Another commercial application of these indirect approaches is a product called ProMetal by ExtrudeHone. Utilizing the 3D Printing technology described above, ProMetal builds metal components by selectively binding metal powder layer by layer. The finished structural skeleton is then sintered and infiltrated with bronze to produce a finished part that is 60% steel and 40% bronze and is used for injection molding tools or final metal parts. Another commercial example is 3D Systems' ST-100 system, which uses selective laser sintering of a steel polymer composite powder to generate a green article. The green article or part is subsequently put through a furnace cycle that removes the polymer binder and infiltrates the metal skeleton with bronze to create a functional fully dense article that can also be used for injection mold tools or final parts.

Page 13, paragraph beginning at line 17 has been amended as follows:

The polymeric binder system is selected from the group consisting of polyethylene, polypropylene, polyacetal, polymethacrylate, polyvinylacetate; co-polymers of polyethylene, polypropylene, polyacetal, polymethacrylate, ~~polyvinylacetate; nylon, wax,~~ polyvinylacetate, nylon; wax; phenolic and combinations thereof. More preferably the binder system utilizes

polymers and co-polymers of nylon, such as ones selected from the group consisting of co-polymers of nylon 6, nylon 9, nylon 10, nylon 11, and nylon 12. Most preferable are co-polymers of nylon 6 and nylon 12, such as nylon 6, 12. Nylon homopolymers may also be appropriate, such as nylon 6 or nylon 12. The polymeric binder must melt and freeze or recrystallize between about 75° C and about 200° C and more preferably between about 100° C and about 150° C to obtain optimal processing. It is theorized that a co-polymer having a lower melt viscosity facilitates optimal processing.